

traction motor for application to the external electrical load.

22. (New) The system according to claim 21, wherein said switching device comprises a contactor.

23. (New) The system according to claim 21, further comprising:

a filter coupled to said switching device for minimizing noise in the diverted AC power input; and

a transformer coupled between said filter and the external electrical load.

24. (New) The system according to claim 21, further comprising:

a DC-to-DC converter coupled between said first electric machine and said first inverter for generating lower voltage DC electrical power from the DC electrical power produced by said first inverter;

an inverter coupled to said DC-to-DC inverter for converting the lower voltage DC electrical power to an AC power output for application to the external electrical load.

<sup>25.</sup>  
~~26.~~ (New) The system according to claim 24, further comprising a second filter for minimizing noise in the AC power output.

<sup>26.</sup>

~~27.~~ (New) The system according to claim 24, wherein:  
said DC-to-DC converter is a two-way DC-to-DC converter;  
said inverter comprises a rectifier, and  
said system is operable in a charger mode..

<sup>27.</sup>

~~28.~~ (New) The system according to claim 27, further comprising means for selecting operation of said system in a generator mode versus the charger mode.

28.

~~29.~~ (New) A motor vehicle electrical power generating system for powering an electrical load external to the vehicle, comprising:

an internal combustion engine;

a battery;

an electric generator coupled to said internal combustion engine for generating AC electrical power when said internal combustion engine is running;

a generator inverter disposed between said electric generator and said battery for converting the AC electrical power generated by said electric generator to DC electrical power;

a DC-to-DC converter coupled between said electric generator and said generator inverter for generating lower voltage DC electrical power from the DC electrical power produced by said generator inverter; and

an inverter coupled to said DC-to-DC inverter for converting the lower voltage DC electrical power to an AC power output to power the external electrical load.

29.

~~30.~~ (New) The system according to claim 29, further comprising a second filter for minimizing noise in the AC power output.

30.

~~31.~~ (New) The system according to claim 29, wherein:  
said DC-to-DC converter is a two-way DC-to-DC converter;  
said inverter comprises a rectifier; and  
said system is operable in a charger mode.

31.

~~32.~~ (New) The system according to claim 31, further comprising means for selecting operation of said system in a generator mode versus the charger mode.